

This is the html version of the file

[http://www.sunjinchem.com/download/CATALOGUES/SUNJIN\\_Cosmetics\\_MICRO%20BEADS.pdf](http://www.sunjinchem.com/download/CATALOGUES/SUNJIN_Cosmetics_MICRO%20BEADS.pdf).

Google automatically generates html versions of documents as we crawl the web.

To link to or bookmark this page, use the following url: [http://www.google.com/search?q=cache:ZqMGTFsK9IkJ:www.sunjinchem.com/download/CATALOGUES/SUNJIN\\_Cosmetics\\_MICRO2520BEADS.pdf+silica++L-1500+porous+hollow&hl=en&gl=us&ct=clnk&cd=2](http://www.google.com/search?q=cache:ZqMGTFsK9IkJ:www.sunjinchem.com/download/CATALOGUES/SUNJIN_Cosmetics_MICRO2520BEADS.pdf+silica++L-1500+porous+hollow&hl=en&gl=us&ct=clnk&cd=2)

*Google is neither affiliated with the authors of this page nor responsible for its content.*

These search terms have been highlighted: **silica | 1500 porous hollow**

Page 1

## Cosmetic Raw Material

# Micro Beads

SUNJIN CHEMICAL CO is an R&D driven company that brings innovations to the cosmetic industry.

We have a scope of technologies such as micro-technology, encapsulation and composition technology, inorganic synthesis technology and more.

For more information,  
please visit our home page: [www.sunjinchem.com](http://www.sunjinchem.com)  
or email: [sales@sunjinchem.co.kr](mailto:sales@sunjinchem.co.kr)  
or call office tel: 82-31-494-6322(300)  
or call mobile: 82-11-9920-1454

2004. 11.1  
**SUNJIN**  
SUNJIN CHEMICAL R&D  
CENTER

---

**Page 2**

## **TECHNOLOGY OVERVIEW**

### **Technology Overview**

#### **Micro bead synthesis**

##### **Silica beads**

##### **PMMA beads**

#### **Nano powder synthesis**

**ZnO, TiO<sub>2</sub>, ZrO<sub>2</sub>, SiO<sub>2</sub>**

##### **PMMA**

#### **Encapsulation with**

**Silica**

**PMMA**

#### **Surface treatment**

#### **Sol & thin film coating**

#### **Composition**

**TiO<sub>2</sub>/Silica**

#### **Dispersion**

**TiO<sub>2</sub>**

**ZnO**

[www.sunjinchem.com](http://www.sunjinchem.com)  
[www.sunjinchem.com](http://www.sunjinchem.com)

---

**Page 3**

## **SILICA BEADS: SUNSIL series**

### **SUNSIL 130 series & Naked Silica Beads**

<b>Oil absorption</b>	<b>Low</b>	<b>Standard</b>
<b>Avg. Particle size</b>	<b>(0.6 0.9 cc/g)</b>	<b>(0.9 1.3 cc/g)</b>
<b>1.3 <math>\mu\text{m}</math></b>	-	<b>Sunsil 20</b>
<b>6.9 <math>\mu\text{m}</math></b>	<b>Sunsil 130L</b>	<b>Sunsil 130</b>
<b>12.16 <math>\mu\text{m}</math></b>	-	-

*Sunsil-20*

### **Oil absorption comparison table**

*Sunsil-130*

<b>Silica</b>	<b>cc/g</b>
<b>SUNSIL 150H</b>	<b>SUN</b>
<b>SUNSIL 130H</b>	
<b>SUNSIL 130</b>	
<b>SUNSIL 130L</b>	
<b>Spheron P-1500</b>	<b>0.6</b>
<b>Spheron P-1000</b>	
<b>Spheron L-1500</b>	
<b>H51</b>	
<b>MSS-500/3H</b>	
<b>Silica Bead SB-700</b>	

[www.sunjinchem.com](http://www.sunjinchem.com)  
[www.Sunjinchem.com](http://www.Sunjinchem.com)

---

Page 4

## Silica Beads

Naked silica bead	Size(μm)	Oil (cc/g) Absorption	
<b>SUNSIL 130NP</b> —Non porous“	7	0.40.6	
<b>SUNSIL 130L</b> —Low“	7	0.60.9	2
<b>SUNSIL 130</b> —Standard“	7	0.91.2	2
<b>SUNSIL 130H</b> —High oil absorption“	7	1.21.5	
<b>SUNSIL 20</b> —Small sized“	2	0.91.2	
<b>SUNSIL 150H</b> —Very High oil absorption“	15	1.42.1	
 <b>Surface treated silica bead</b>			
<b>SUNSIL 130SC</b>		<b>Silicone oil coated</b> For pressed powders --> good pressability Better smoothness and softer feeling	

[www.sunjinchem.com](http://www.sunjinchem.com)  
[www.sunjinchem.com](http://www.sunjinchem.com)

---

**Page 5**

## **SUNPMMA S & The most pure PMMA bead in the world**

### *Specifications*

<b>Size distribution</b>	<b>Poly-dispersed</b>	
<b>Appearance</b>	<b>White fine powder</b>	
<b>Cross linkage</b>	<b>Cross-linked</b>	
<b>Avg. Particle Size</b>	<b>5 10 <math>\mu\text{m}</math></b>	
<b>Apparent density</b>	<b>About 0.71 g/cc</b>	
<b>Oil absorption</b>	<b>0.4 0.6 cc/g</b>	
<b>Moisture</b>	<b>5% max.</b>	<i>Regulation</i>
<b>Residual monomer</b>	<b>10 ppm max.</b>	<b>INCI Name: Methyl Polymer</b>
<b>p H</b>	<b>Neutral</b>	<b>CAS No: 25777-71-6</b>
<b>Odor</b>	<b>Odorless</b>	<b>EINECS No: Exempt</b>
		<b>Custom Tariff No:</b>

### *Residual Monomer Content Comparison table*

Product		MMA content	EGDMA content	Bad
Jurymer MB-1		144 ppm	0 ppm	
Matsmoto, Microporal M100		44 ppm	0 ppm	
Negami Artpearl		37 ppm	14 ppm	
SUNPMMA-S	Lot: 03042210	7.5 ppm	0 ppm	
	Lot: 03100201	5 ppm	0 ppm	
	Lot: 03111501	6.5 ppm	0 ppm	

[www.sunjinchem.com](http://www.sunjinchem.com)

---

Page 6

## Porous PMMA Bead & SUNPMMA P

### *Specifications*

<b>Size distribution</b>	<b>Poly-dispersed</b>
<b>Appearance</b>	<b>White fine powder</b>
<b>Cross linkage</b>	<b>Cross-linked</b>
<b>Avg. Particle Size</b>	<b>10 13<math>\mu</math>m</b>
<b>Apparent density</b>	<b>About 0.35 g/cc</b>
<b>Oil absorption</b>	<b>1.7 2.4 cc/g</b>
<b>Moisture</b>	<b>6% max.</b>
<b>Residual monomer</b>	<b>10 ppm max.</b>
<b>p H</b>	<b>Neutral</b>
<b>Odor</b>	<b>Odorless</b>

<b>PMMA</b>	<b>cc/g(by SUNJIN)</b>	<b>Manufacturer</b>
<b>SUNPMMA-S</b>	<b>0.47</b>	<b>Sunjin</b>
<b>Jurymer MB-1</b>	<b>0.45</b>	<b>Nihon Junyaku</b>
<b>Micropearl M 305</b>	<b>0.45</b>	<b>Matsumoto</b>
<b>SUNPMMA-P</b>	<b>2.12</b>	<b>SUNJIN</b>
<b>Covabead LH85</b>	<b>1.82</b>	<b>Nihon Junyaku</b>
<b>Microsponge 5640</b>	<b>2.02</b>	<b>AP Pharm</b>

[www.sunjinchem.com](http://www.sunjinchem.com)  
[www.sunjinchem.com](http://www.sunjinchem.com)

---

Page 7

## Poly Urethane Bead: SUNPU, The Most Elastic Polymer Bead

### *Specifications*

<b>Size distribution</b>	<b>Poly-dispersed</b>	<b>T</b>
<b>Appearance</b>	<b>White fine powder</b>	<b>10% De</b>
<b>Avg. Particle Size</b>	<b>17 <math>\mu</math>m</b>	
<b>Moisture</b>	<b>5% max.</b>	
<b>p H</b>	<b>Neutral</b>	
<b>Odor</b>	<b>Odorless</b>	

**INCI Name:****HDI/Trimethylol****Hexyl****Lactone cross polymer**

[www.sunjinchem.com](http://www.sunjinchem.com)  
[www.sunjinchem.com](http://www.sunjinchem.com)

---

**Page 8****Poly Ester Bead - SUNPET****Nylon 12 like feeling***Specifications*

<b>Size distribution</b>	<b>Poly-dispersed</b>
<b>Appearance</b>	<b>White fine powder</b>
<b>Avg. Particle Size</b>	<b>5 10 <math>\mu\text{m}</math></b>
<b>Moisture</b>	<b>5% max.</b>
<b>p H</b>	<b>Neutral</b>
<b>Odor</b>	<b>Odorless</b>

*Regulation***INCI Name: Poly Ethylene Terephthalate****CAS No. 25038-59-9****Tg: 70°C****[www.sunjinchem.com](http://www.sunjinchem.com)  
[www.sunjinchem.com](http://www.sunjinchem.com)**

## Surface Treated Fillers

### TALC J-DS – Surface treated Talc

Specification	MMC
<b>Components</b>	
Talc	97.0 %
Methicone	1.0 %
Dimethicone	2.0 %
<b>API</b>	
Appearance	WHITE POWDER
Odor	ODORLESS
Loss on Drying	< 1% (1.0g, 105°C, 2hr)
Lead	< 20ppm
Arsenic	< 5ppm

### TiO2 4S – Silicone Oil coated Titanium Dioxide

Specification	TiO2
<b>Components</b>	
TiO2	96.0 %
Methicone	4.0 %
<b>API</b>	
Appearance	WHITE POWDER
Odor	ODORLESS
Loss on Drying	< 1% (1.0g, 105°C, 2hr)
Lead	< 20ppm
Arsenic	< 5ppm

[First Hit](#)[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)[Generate Collection](#)[Print](#)

L10: Entry 21 of 37

File: PGPB

May 22, 2003

DOCUMENT-IDENTIFIER: US 20030096910 A1

TITLE: Ion-sensitive, water-dispersible polymers, a method of making same and items using same

Detail Description Table CWU:

12TABLE 12 Particles from Presperse, Inc. selected for use in pre-moistened wipes  
Name Composition Characteristics MCP-45 Mica and polymethyl Fine powder, platelets  
methacrylate coated with microspheres, 13-17 microns Sericite SL-012 98% mica, 2%  
methicone Fine white powder, hydrophobic surface, 2-10 microns Rose talc Talc White  
powder, 10-12 microns Permethyl 104A Iso-octahexacontane (polyisobutene) Cashmir K-  
II Mica (97%), silica Fine white powder, beads (3%), platelets coated with 0.3  
microns microspheres, 10-14 microns Synthecite FNK-100 Synthetic Fine powder, 10-15  
fluorphogopite microns Ganzpearl GMX-0610 Methyl methacrylate Spherical powder,  
crosspolymer 4.5-8.5 microns Ganzpearl GS-0605 Styrene/ White powder, 4.5-8.5  
divinylbenzene microns copolymer Ganzpearl PS-8F Styrene/ 0.4 microns  
divinylbenzene copolymer Spheron N-2000 Amorphous silica White powder, 2-15  
microns, low oil absorption Spheron L-1500 Amorphous silica White powder, 3-15  
microns, high oil absorption

[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)